

Current Industrial Reports
U. S. Department of Commerce
Economics and Statistics Administration
Bureau of the Census

Electromedical Equipment and Irradiation Equipment (Including X-Ray) - 1997

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Information about the scope of the survey, methodology, explanation of terms and historical notes for this survey may be found in the introduction of the 1995 Manufacturing Profiles, issued June 1997.

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Summary of Findings: During 1997, the total value of shipments of electromedical and irradiation equipment increased 4.8 percent to \$11.8 billion, from the 1996 level of \$11.2 billion. X-ray and other irradiation equipment increased 8.1 percent from its 1996 level. Electromedical equipment increased 3.7 percent to \$8.6 billion, from the 1996 level of \$8.3 billion.

Table 1. Value of Shipments of Electromedical Equipment and Irradiation Equipment by Class of Product: 1991 to 1997
[Value in millions of dollars]

Product code	Product description	1997	1996	1995	1994	1993	1992	1991
38440	X-ray and other irradiation equipment	3,137.1	2,900.9	2,698.1	2,458.2	2,480.0	2,270.2	2,205.2
38450	Electromedical equipment.....	8,622.7	8,318.8	7,124.8	6,752.1	6,222.0	6,273.1	5,673.8

Table 2. Quantity and Value of Shipments of Electromedical Equipment and Irradiation Equipment: 1997 and 1996
[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1997		1996	
			Quantity	Value	Quantity	Value
	Electromedical and irradiation equipment.....	259	(X)	11,759,717	(X)	11,219,683
	Medical diagnostic equipment:					
	X-ray equipment:					
38440 02	Digital radiography equipment.....	6	6,400	159,840	7,268 r/	147,883
38440 03	Computerized axial tomography (CT OR CAT SCAN).....	6	2,660	543,091	r/ 2,483	524,526
38440 09	Dental and conventional.....	14	22,811	520,549	r/ 22,713	487,225
38440 11	All other medical diagnostic X-ray equipment.....	12	(X)	367,688	(X) r/	299,099
38440 06	Nuclear medicine equipment (all equipment used for nuclear in vivo studies).....	7	1,441	363,128	1,155	307,263
38450 18	Magnetic resonance imaging equipment (MRI).....	7	(D)	(D)	(D)	(D)
38450 17	Ultrasound scanning devices.....	14	13,863	1,074,018	r/ 10,826	935,994
38450 11	Electrocardiograph (EKG).....	0	44,164	202,717	46,142	204,281
38450 13	Electroencephalograph (EEG) and Electromyograph (EMG) 1/.....	0	(D)	(D)	(D)	(D)
38450 21	Audiological equipment.....	0	(X)	10,544	(X)	11,099
38450 23	Endoscopic equipment (bronchoscope, cystoscope, proctosigmoidoscope, colonoscope, etc.).....	0	(D)	(D)	(D)	(D)
38450 25	Respiratory analysis equipment.....	5	4,477	39,291	r/ 5,295	48,541
38450 29	All other medical diagnostic equipment 1/.....	25	(X)	229,936	(X) r/	242,885
	Patient monitoring equipment:					
38450 51	Intensive care/coronary care units, including component modules such as temperature, blood pressure, and pulse.....	21	(X)	627,084	(X)	597,819
38450 53	Prenatal monitoring 2/.....	0	(X)	(D)	(X)	(D)
38450 55	Respiratory monitoring 2/.....	7	(X)	88,046	(X)	100,688
38450 57	All other patient monitoring.....	36	(X)	588,746	(X)	608,904
	Medical therapy equipment:					
38450 43	Ultrasound therapy.....	0	(X)	12,203	(X)	11,387
38450 31	Pacemakers.....	8	220,915	733,335	204,605 r/	636,018
38450 33	Defibrillators.....	10	50,024	578,780	49,735	528,073
38450 39	Dialyzers, including machines and equipment	5	(X)	458,290	(X) r/	385,735
38450 41	Medical laser equipment.....	17	(X)	600,041	(X)	559,526
38440 32	Radiation therapy (linear accelerators, X-ray, cobalt 60, brachetherapy) 3/.....	0	(X)	(D)	(X)	(D)
38450 49	All other medical therapy equipment.....	35	(X)	748,190	(X) r/	656,469
	All other irradiation and electromedical equipment:					
38440 13	Industrial and scientific X-ray equipment.....	17	2,957	193,030	r/ 2,658 r/	172,627
38440 21	X-ray tubes (sold separately).....	0	45,391	413,196	45,939	421,872
38440 23	Other non-medical irradiation equipment, including gamma and beta ray equipment n.e.c.	0	(X)	20,578	(X)	20,024

Continued

Table 2. Quantity and Value of Shipments of Electromedical Equipment and Irradiation Equipment: 1997 and 1996
[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1997		1996	
			Quantity	Value	Quantity	Value
38440 27	Parts and accessories for X-ray equipment and other non-medical irradiation equipment n.e.c. 3/.....	22	(X)	555,954	(X) r/	520,332
	Surgical systems:					
38450 35	Electrosurgical equipment.....	14	(X)	339,940	(X)	339,205
38450 71	Heart-lung machines, excluding iron lungs 4/.....	0	(D)	(D)	(D)	(D)
38450 73	Blood flow systems 4/.....	7	(X)	328,609	(X)	320,307
38450 75	All other surgical support systems.....	16	(X)	384,314	(X) r/	399,573
38450 83	Other electromedical equipment (except diagnostic and therapeutic) n.e.c.	13	(X)	82,067	(X) r/	81,469
38450 89	Electromedical parts and accessories, including diagnostic and therapeutic n.e.c.	42	(X)	705,834	(X)	784,931

Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified.
r/Revised by 5 percent or more from previously published data. X Not applicable.

1/Product code 38450 13 is combined with product code 38450 29 to avoid disclosing data for individual companies.

2/Product code 38450 53 is combined with product code 38450 55 to avoid disclosing data for individual companies.

3/Product code 38440 32 is combined with product code 38440 27 to avoid disclosing data for individual companies.

4/Product code 38450 71 is combined with product code 38450 73 to avoid disclosing data for individual companies.

Table 3. Shipments, Exports, and Imports of Electromedical and Irradiation Equipment: 1997
[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) 1/	Imports for consumption (value) 2/ 3/
38440 03	Computerized axial tomography (CT or CAT scan).....	543,091	102,167	102,839
38440 02, 09, 11, 06, 32	Medical X-ray and nuclear equipment, diagnostic and therapeutic 4/.....	1,411,205	525,573	524,917
38440 13	Industrial and scientific X-ray equipment.....	193,030	135,496	69,864
38440 21	X-ray tubes sold separately.....	413,196	128,810	92,759
38440 27	Parts and accessories for X-ray equipment and other nonmedical irradiation equipment, n.e.c. 5/.....	555,954	345,903	253,490
38440 23	Nonmedical irradiation equipment, including gamma- and beta-ray equipment, n.e.c.	20,578	23,010	6,983
38450 11	Electrocardiograph (EKG), diagnostic.....	202,717	62,767	18,899
38450 13	Electroencephalographs (EEGs) and Electromyographs (EMGs).....	(D)	(D)	8,254
38450 17	Ultrasound scanning devices, diagnostic.....	1,074,018	484,022	63,856
38450 18	Magnetic resonance imaging (MRI) equipment).....	(D)	(D)	140,970
38450 31	Pacemakers, therapeutic.....	733,335	212,421	17,868
38450 21,23, 25, 29	Diagnostic electromedical equipment, n.e.c.	(D)	(D)	465,781
38450 33, 41, 49	Therapeutic electromedical equipment, n.e.c.	1,927,011	213,898	46,443
38450 71,73, 75, 83	Electromedical equipment and irradiation equipment, including X-ray, n.e.c.	794,990	349,906	301,566
38450 39	Dialyzers, machines and equipment.....	458,290	82,464	49,248
38450 51, 53, 55, 57	Patient monitoring equipment.....	1,303,876	253,234	28,645
38450 43	Therapeutic ultrasound equipment.....	12,203	17,776	2,971
38450 35	Electrosurgical equipment.....	339,940	360,070	59,865
38450 89	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c.	705,834	646,695	497,073

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified.

1/Source: Bureau of the Census report EM 545, U.S. Exports.

2/Source: Bureau of the Census report IM 145, U.S. Imports for Consumption.

3/Represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

4/Manufacturers' shipments excludes product code 38440 32 to avoid disclosing data for individual companies.

5/Manufacturers' shipments includes product code 38440 32 to avoid disclosing data for individual companies.

Table 4. Comparison of Standard Industrial Classification-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 1997

Product code	Product description	Export number 1/	Import number 2/
38440 03	Computerized axial tomography (CT or CAT scan)	9022.12.0000	9022.12.0000
38440 02, 09, 11, 06, 32	Medical X-ray and nuclear equipment, diagnostic and therapeutic	9022.13.0000 9022.14.0000 9022.21.0000	9022.13.0000 9022.14.0000 9022.21.0000
38440 13	Industrial and scientific X-ray equipment	9022.19.0000	9022.19.0000
38440 21	X-ray tubes sold separately	9022.30.0000	9022.30.0000
38440 27	Parts and accessories for X-ray equipment and other nonmedical irradiation equipment, n.e.c.	9022.90.4000 9022.90.6000 9022.90.8000	9022.90.4000 9022.90.6000 9022.90.9095
38440 23	Nonmedical irradiation equipment, including gamma- and beta-ray equipment, n.e.c.	9022.29.8000	9022.29.8000
38450 11	Electrocardiograph (EKG), diagnostic	9018.11.0040	9018.11.3000
38450 13	Electroencephalographs (EEGs) and electromyographs (EMGs), diagnostic	9018.19.9535	9018.19.9535
38450 17	Ultrasound scanning devices, diagnostic	9018.12.0000	9018.12.0000
38450 18	Magnetic resonance imaging (MRI) equipment	9018.13.0000	9018.13.0000
38450 31	Pacemakers, therapeutic	9021.50.0000	9021.50.0000
38450 21, 23, 25, 29	Diagnostic electromedical equipment, n.e.c.	9018.19.4000 9018.19.9530 9018.19.9550	9018.19.4000 9018.19.9530 9018.19.9550
38450 33, 41, 49	Therapeutic electromedical equipment, n.e.c.	9018.90.7060	9018.20.0040 9018.90.6400 9018.90.7560
38450 71, 73, 75, 83	Electromedical equipment and irradiation equipment including X-ray, n.e.c.	9018.20.0000 9018.90.7080	9018.20.0080 9018.90.7580
38450 39	Dialyzers, machines and equipment	9018.90.7020	9018.90.7520
38450 51, 53, 55, 57	Patient monitoring equipment	9018.19.5500	9018.19.5500
38450 43	Therapeutic ultrasound equipment	9018.90.7040	9018.90.7540
38450 35	Electrosurgical equipment	9018.90.6000	9018.90.6000
38450 89	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c.	9018.11.0080 9018.19.7500 9018.19.9560 9018.19.7070	9018.11.9000 9018.19.9560 9018.90.7570 9021.90.4080

n.e.c. Not elsewhere classified.

1/Source: 1997 edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (1997).